**COMMONWEALTH OF VIRGINIA**
**Department of Environmental Quality**
**Valley Regional Office**

# STATEMENT OF LEGAL AND FACTUAL BASIS

Ethan Allen, Inc.
Bridgewater, Rockingham County, Virginia
Permit No. VRO80548

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Ethan Allen, Inc. has applied for renewal of the Title V Operating Permit for its furniture manufacturing and finishing facility in Bridgewater, Virginia. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

Deputy Regional Director:_____ Date:_____

**Facility Information**

**Permittee**
Ethan Allen, Inc.
P.O. Box 66
Bridgewater, Virginia 22812

**Responsible Official**
Gary Keppel
Plant Manager

**Facility**
Ethan Allen, Inc. – Bridgewater Division
103 Chesapeake Avenue
Bridgewater, Virginia 22812

**Contact Person**
Roberta Keppel
Environmental Contact
(540) 828-2546

**AFS Identification Number:** 51-165-0073

**Facility Description:** SIC Code 2511 – Wood Household Furniture, Except Upholstered

Ethan Allen, Inc. – Bridgewater Division (Ethan Allen) is involved in the manufacture and finishing of wood furniture, including tables, chests and cabinets. The facility operates several pieces of woodworking and finishing equipment which are controlled by three cyclones and four fabric filters. The two boilers in operation at the facility provide space heat and steam to the dry kilns.

The facility is a Title V major source of PM-10, Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs). The facility has requested a cap to be a synthetic minor HAP source as part of this permit renewal. This source is located in an attainment area for all pollutants and is a Prevention of Significant Deterioration (PSD) minor source. The boilers are permitted under a minor New Source Review (NSR) permit issued on March 1, 2004.

## CHANGES TO EXISTING TITLE V PERMIT

On November 21, 2003, Ethan Allen submitted a minor NSR permit application to switch the two boilers operated at the facility from No. 5 to No. 2 distillate fuel oil. The permit was issued on March 1, 2004. Therefore the following changes have been made to the Title V permit to incorporate the new applicable requirements for these boilers.

### Section III, Fuel Burning Requirements (B1 and B2)

*Limitations:*

Condition 2. No. 2 distillate oil is listed as an approved fuel for the Erie City boiler (B1) and No. 5 fuel oil was removed from the condition.

Condition 3. No. 2 distillate oil is listed as an approved fuel for the Iron Fireman boiler (B2) and No. 5 fuel oil was removed from the condition.

Condition 4. The allowable sulfur content of the No. 2 fuel oil was lowered to 0.5%.

Condition 5. The previous finishing waste conditions were combined into one comprehensive requirement.

Condition 8. Hourly emission limits from the Erie Boiler (B1) were modified to reflect the lower emissions from No. 2 distillate oil. The emissions were also updated to account for the revised AP-42 emission factors for wood fired boilers, Table 1.6-1 and Table 1.6-2 published in September 2003.

Condition 9. Hourly emission limits from the Iron Fireman (B2) were modified to reflect the lower emissions from No. 2 distillate oil.

Condition 10. The annual emission from B1 and B2 have also been lowered to reflect the No. 2 distillate oil usage and updated to account for the revised AP-42 emission factors for wood fired boilers.

Condition 11. The visible emissions from B1 and B2 while burning No. 2 distillate fuel oil shall not exceed 10% opacity except for one six-minute period in any one hour in which visible emission shall not exceed 20% opacity as determined by EPA Method 9.

*Recordkeeping:*

Condition 1. Fuel certifications are required with each No. 2 distillate oil shipment, which shall include sulfur content of the fuel oil, date, time and amount of No. 2 fuel oil received.

Condition 2a. Monthly and annual throughput records for the No. 2 distillate fuel oil.

**Section IV, Woodworking Equipment Requirements**

*Periodic Monitoring:*

Condition 2. Annual inspections required by this condition apply only to the closed loop cyclone (CDC-C).

*Compliance Assurance Monitoring:*

Condition 1. The four fabric filters (CDBF-1, CDBF-2, CDBF-3 and CDBF-4) are subject to the Fabric Filter Compliance Assurance Monitoring (CAM) Plan. A copy of the Fabric Filter CAM plan is included in Attachment C.

Condition 2. If the facility experiences more than 3 excursions from the Fabric Filter CAM plan within a semi-annual period a Quality Improvement Plan (QIP) must be developed.

Condition 3. The two remaining cyclones (CDC-A and CDC-B) are subject to the Cyclone Compliance Assurance Monitoring (CAM) Plan. A copy of the Cyclone CAM plan is included in Attachment D.

Condition 4. If the facility experiences more than 3 excursions from the Cyclone CAM plan within a semi-annual period a Quality Improvement Plan (QIP) must be developed.

*Recordkeeping:*

Condition 1.d. Log of annual inspections on the closed-loop cyclone.

Condition 2. Documentation of monitoring required by the Fabric Filter CAM plan.

Condition 3. Documentation of monitoring required by the Cyclone CAM plan.

**Section V., Furniture Finishing Equipment Requirements**

*Limitations:*

Condition 1. Plastic baffle filters and any combination of already approved filters may be used in the spray booths (F1).

*Recordkeeping:*

Condition 1. For the purpose of calculating HAP emissions, the HAP content of each finishing product shall be determined by the certified product data sheet and if a HAP range is given the maximum value shall be used in calculations.

Condition 2.a. The facility is required to keep certified product data sheet for each finishing product.

Condition 2.b. A log of the monthly and throughput of each finishing product used in tons.

**Section VI, Facility Wide Conditions – HAP Emissions**

*Limitations*

Condition 4. The facility has voluntarily requested a limitation on their HAP emissions. Therefore, upon issuance of this permit the facility will become a minor source of HAPs with a limit of less than 10 tons per year of an individual HAP or less than 25 tons per year of any combination of HAPs.

*Monitoring:*

Condition 6. The facility shall calculate individual HAP emissions (in tons) to determine compliance with the established limit each month.

Condition 7. The facility shall calculate total HAP emissions (in tons) to determine compliance with the established limit each month.

*Recordkeeping*

Condition 1.d. The monthly and annual mass of total and individual HAPs used, in tons, calculated monthly.

**Section IX., General Conditions**

All general conditions of this Title V draft permit have been updated to reflect current (07-08-2003) boilerplate language and requirements.

**COMPLIANCE STATUS**

The facility is inspected once a year. The facility was last inspected on May 5, 2003, and was determined to be in compliance.

## EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

*Table I. Significant Emission Units.*

| Emission Unit ID | Stack ID | Emission Unit Description | Size/Rated Capacity* | Pollution Control Device (PCD) Description | PCD ID | Pollutant Controlled | Applicable Permit Date |
|---|---|---|---|---|---|---|---|
| **Fuel Burning Equipment** | | | | | | | |
| B1 | EP-B1 | Erie City Wood & Oil Boiler Type VL/ 311 HP (Constructed in 1951) | 22.9 MMBtu/hr | Fly Ash Mechanical Collector American Standard Series 348 RT "N" 2W2 | CD-B1 | PM PM-10 | 03/01/2004 |
| B2 | EP-B2 | Iron Fireman Oil Boiler Model 302-H-400 (Constructed 1971) | 13.7 MMBtu/hr | - | - | - | 03/01/2004 |
| **Wood Working Equipment** | | | | | | | |
| WW1 | EPC-A | Various Pieces of Wood Working Equipment | 29,000 cfm | Mechanical Cyclone Virginia Blower Company | CDC-A | PM PM-10 | - |
| WW1 | EPC-B | Various Pieces of Wood Working Equipment | 29,000 cfm | Mechanical Cyclone Virginia Blower Company | CDC-B | PM PM-10 | - |
| WW1 | EPC-C | Various Pieces of Wood Working Equipment | 28,000 cfm | Mechanical Cyclone (closed loop) Virginia Blower Company | CDC-C | PM PM-10 | - |
| WW1 | EPBF-1 | Various Pieces of Wood Working Equipment | 45,900 cfm | Carter Day Reverse Jet Fabric Filter Model 144RJ96 | CDBF-1 | PM PM-10 | - |
| WW1 | EPBF-2 | Various Pieces of Wood Working Equipment | 45,900 cfm | Carter Day Reverse Jet Fabric Filter Model 144RJ96 | CDBF-2 | PM PM-10 | - |
| WW1 | EPBF-3 | Various Pieces of Wood Working Equipment | 22,950 cfm | Carter Day Reverse Jet Fabric Filter Model 72RJ96 | CDBF-3 | PM PM-10 | - |

| Emission Unit ID | Stack ID | Emission Unit Description | Size/Rated Capacity* | Pollution Control Device (PCD) Description | PCD ID | Pollutant Controlled | Applicable Permit Date |
|---|---|---|---|---|---|---|---|
| WW1 | EPBF-4 | Various Pieces of Wood Working Equipment | 22,950 cfm | Carter Day Reverse Jet Fabric Filter Model 72RJ96 | CDBF-4 | PM<br>PM-10 | - |
| **Furniture Finishing Equipment** | | | | | | | |
| F1 | EP-F1 to EP-F12 | Twelve (12) Paint Spray Booths | NA | Baffles and Filters | F-1 | PM<br>PM-10 | - |
| DT1 | - | Dip Tank | 56”L x 30” W x 26”D | - | - | - | - |
| G1 | - | Glue Operations | NA | - | - | - | - |

*The Size/Rated capacity is provided for informational purposes only and is not an applicable requirement.

## EMISSIONS INVENTORY

A copy of the permit application emission inventory is attached as Attachment A. Emissions are summarized in the following tables.

*Table II. Actual Criteria Pollutant Emissions for the Wood Furniture Manufacturing and Finishing Facility.*

| | Criteria Pollutant Emissions (tons/yr) | | | | |
|---|---|---|---|---|---|
| | VOC | CO | $SO_2$ | PM-10 | $NO_x$ |
| Fuel Burning Equipment (Boilers B1 & B2) | 0.01 | .17 | 10.98 | 0.30 | 1.90 |
| Woodworking (WW1) | - | - | - | 0.30 | - |
| Finishing (F1) | 118.9 | - | - | 1.73 | - |
| **Total** | **118.91** | **0.17** | **10.98** | **2.03** | **1.90** |

*Table III. Actual Hazardous Air Pollutant Emissions for the Wood Furniture Manufacturing and Finishing Facility.*

| Pollutant (CAS #) | Hazardous Air Pollutant Emissions (tons/yr) |
|---|---|
| Methanol (67-56-1) | 0.47 |
| Toluene (108-88-3) | 2.17 |
| Methyl Ethyl Keytone (78-93-3) | 1.73 |
| Xylene (1330-20-7) | 0.53 |
| Ethyl Benzene (100-41-4) | 0.11 |
| Total Glycol Ethers | 0.79 |

* Please note the facility has several other HAPs which have negligible emissions.

## EMISSION UNIT APPLICABLE REQUIREMENTS

### Fuel Burning Equipment (B1 and B2)

*Limitations*

The following limitations are requirements from the minor NSR permit issued on March 1, 2004. Please note that the condition numbers are from the 2004 permit; a copy of the permit is enclosed as Attachment B.

Condition 3: Particulate emissions from Erie City boiler (B1) shall be controlled by a multicyclone.

Condition 4: Limit on the types of fuel to be combusted in the Erie City boiler (B1).

Condition 5: Limit on the types of fuel to be combusted in the Iron Fireman boiler (B2).

Condition 6: Limit on sulfur content for No. 2 distillate fuel oil to be combusted in boilers.

Condition 7: No. 2 distillate fuel oil certification.

Condition 8: Definition of finishing waste and a limit on amount of finishing waste that can be consumed by the boilers (B1 and B2).

Condition 9: Limit on No. 2 distillate fuel oil consumption for the boilers (B1 and B2).

Condition 10: Limit on wood waste consumption for the Erie City boiler (B1).

Condition 11: Hourly emission limit for criteria pollutants from Erie City boiler (B1).

Condition 12: Hourly emission limit for criteria pollutants from Iron Fireman boiler (B2).

Condition 13: Annual emission limit for criteria pollutants from both boilers (B1 and B2).

Condition 14: Visible emission limit of 10%, while burning No. 2 distillate fuel oil.

Condition 15: Visible emission limit of 20%, while burning wood waste.

Condition 21: All operators of air pollution control equipment shall be trained to properly operate the equipment.

*Monitoring and Recordkeeping*

The monitoring and recordkeeping requirements in Condition 16 and 21 of the NSR permit meet the Part 70 requirements.

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include sulfur content of fuel oil, annual throughput of No. 2 fuel oil, annual throughput of finishing waste, and annual throughput of wood waste.

Actual emissions from the operation of the two boilers will be calculated using the following equations:

1. For wood waste combustion:

$E = F \times W$

..... Equation 1

Where:

E = Emission rate (lb/time period)

F = Pollutant specific emission factors as follows:

| | | |
|---|---|---|
| TSP | = | 2.0 lb/ton wood waste |
| PM-10 | = | 2.0 lb/ton wood waste |
| $SO_2$ | = | 0.10 lb/ton wood waste |
| CO | = | 2.4 lb/ton wood waste |
| $NO_x$ | = | 1.96 lb/ton wood waste |
| VOC | = | 0.068 lb/ton wood waste |

W = Wood waste combusted (ton/time period)

2. For No. 2 distillate fuel oil combustion:

$E = F \times O$

..... Equation 2

Where:

E = Emission rate (lb/time period)

F = Pollutant specific emission factors as follows:

| | | |
|---|---|---|
| TSP | = | 2.0 lb/1000 gal |
| PM-10 | = | 1.0 lb/1000 gal |
| $SO_2$ | = | 142 S lb/1000 gal (S = weight percent sulfur) |
| CO | = | 5.0 lb/1000 gal |
| $NO_x$ | = | 20.0 lb/1000 gal |
| VOC | = | 0.20 lb/1000 gal |

O = No. 2 distillate fuel oil consumed (1000 gal/time period)

It should be noted that no emission factors have been included for the combustion of finishing waste. The finishing waste will only be burned when No. 2 fuel oil is also being burned, and the only criteria pollutant expected from the combustion of the finishing waste is VOC. The finishing waste is expected to burn as well as the fuel oil. Therefore, VOC emissions from the combustion of the finishing waste are considered to be insignificant.

The hourly emissions limits established for all criteria pollutants are based on the capacity of the boilers. Therefore, if the boilers are operated at capacity, or below, there should

not be a violation of the hourly emission rates. Calculations have been included in Attachment E to demonstrate how the limits were obtained.

The annual emission limits established for all criteria pollutants are based on the fuel limits contained within the permit. Regarding these pollutants, the fuel throughput is the factor that determines emission rates. Calculations have been included in Attachment E to demonstrate that if Ethan Allen combusts all that is allowed in the permit, then the permit limits will not be violated. Therefore, as long as the fuel throughput limit is not violated, there is very little chance that the criteria pollutant emission limits will be violated. Recordkeeping demonstrating compliance with the fuel throughput limits can also be used to demonstrate compliance with the criteria pollutant emission limits, satisfying the periodic monitoring requirement.

The permit contains a requirement for Ethan Allen to perform weekly inspections on each boiler stack. If visible emissions are present, a six minute visible emission evaluation must be performed. If during the six minutes, any violations of the 20% opacity standard are noted, a one hour VEE is required to demonstrate compliance with the standard. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit. It should be noted that, based on past inspection reports, there is little likelihood of violation of the visible emission limitation.

The multicyclone on the Erie City (B1) wood fired boiler is not subject to the CAM requirements because the uncontrolled emissions from that Pollutant Specific Emission Unit (PSEU) are below 100 tons per year for each criteria pollutant. See calculations in Attachment E. Therefore the originally established monitoring and recordkeeping will continue to satisfy the periodic monitoring requirements for this unit.

*Testing:*

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

*Reporting:*

No specific reporting has been included in the permit for the fuel burning equipment.

*Streamlined Requirements:*

No streamlined requirements for the fuel burning equipment.

**Wood Working Equipment Requirements (WW1)**

*Limitations:*

Ethan Allen is subject to 9 VAC 5-40-2270, Standard for Particulate Matter (Woodworking Operations). In accordance with this regulation, Ethan Allen will be required to

operate particulate control devices for all wood working equipment and particulate emissions from each device shall not exceed 0.05 gr/dscf.

Ethan Allen operates four fabric filters, one closed-loop cyclone, and two cyclones in order to control particulate emissions from the woodworking equipment. Based on information provided by the source, all control devices that vent to atmosphere are high efficiency units, meaning average efficiencies of approximately 99.0%. Therefore, if the units are achieving the 99.0% control efficiency they should be able to effectively meet the 0.05 gr/dscf requirement.

Ethan Allen is subject to 9 VAC 5-40-2290, Standard for Fugitive Dust/Emissions (Woodworking Operations). In accordance with this regulation, Ethan Allen will be required to cover all conveyors that are used for the collection and transfer of collected wood waste. This condition, in a more general format, is also included in the General Conditions of the permit.

Much of the woodworking equipment was installed prior to 1972 and is subject to the existing source visible standard (9 VAC 5-40-80) of 20% except during one six-minute period in any one hour where visible emissions shall not exceed sixty percent. Several pieces of woodworking equipment have been installed since 1972, and are subject to the new source visible standard (9 VAC 5-50-80) of 20% except during one six-minute period in any one hour where visible emissions shall not exceed thirty percent.

Since any one control device could have existing and new equipment vented through it, meaning two different applicable visible standards, the permit requires that all woodworking equipment stacks meet the new source visible standard of 20/30%.

*Monitoring:*

The facility operates one closed-loop cyclone (CDC-C) on the wood waste storage silo. This unit does not vent directly to atmosphere and therefore is only subject to periodic monitoring requirements. To satisfy the periodic monitoring requirements Ethan Allen is required to perform an annual inspection the cyclone to insure structural integrity of the unit.

The four fabric filters and remaining two cyclones (CDC-A and CDC-B) are subject to Compliance Assurance Monitoring (CAM) plans. These fabric filters and cyclones vent to atmosphere and each have the potential to emit more than 100 tons per year of Particulate Matter.

Separate CAM plans have been developed for each type of control device. The Fabric Filter CAM plan (Attachment C) includes the following requirements:

Visible emissions have been selected as the first indicator because they are indicative of good operation and maintenance of a fabric filter. If the fabric filter is not functioning properly, visible emissions will be present and there is a chance that Ethan Allen is in danger of not meeting the 0.05 gr/dscf requirement. Therefore, visible emissions are an acceptable performance indicator.

The daily inspections of each fabric filter will also satisfy the CAM requirement for the visible emission limitation. Frequent checks for visible emissions will limit malfunctions of the control equipment. As long as the control equipment is operating properly, there is little likelihood of violating the visible emission limitation. The control equipment will limit the amount of particulates that are emitted, thereby limiting visible emissions. If visible emissions are observed a Method 9 VEE is required on that particular control device.

The monthly and annual periodic structural inspections satisfy the second CAM indicator for the woodworking control equipment. These inspections will alert personnel of bag deterioration and early maintenance requirements necessary to obtain proper control efficiencies.

There is also a requirement in the permit for Ethan Allen to maintain devices to continuously measure the pressure drop across each fabric filter. This is included in the CAM plan as a check for operational verification of the fabric filters.

The Cyclone CAM plan (Attachment D) requires the following:

First the facility shall perform a Method 5 performance test on each cyclone to determine the optimal pressure drop range and verify compliance with the 0.05 gr/dscf limitation in the permit. The Method 5 performance test shall be completed within 6 months from the issuance of the permit and repeated once per permit term.

The second indicator for the cyclone CAM is the daily pressure drop monitoring, which will verify the cyclone is operating within the optimal range as determined by the Method 5 performance test. The pressure drop is a good indicator of flow rate and if there is a decrease in the pressure drop below the indicator range, there is also a decrease of flow through the cyclone, which relates to the control efficiency. If there is change in the pressure greater than 10% below the normal operating range inspections of the unit are triggered and corrective action should be taken. This will ensure that the visible emission standard and the particulate emission standard are not exceeded and act as accurate QA/QC monitor for the CAM plan.

The third indicator for each cyclone is monthly inspections of the surfaces and joints to detect early deterioration and leakage. Also the facility is required to perform an annual internal inspection of each cyclone to determine structural integrity of the units.

*Recordkeeping:*

Ethan Allen will be required to keep records of the annual throughput of wood, the monthly waste rate of the wood, the hours of operation of the woodworking equipment, the daily inspections performed on each stack, annual inspections for closed loop cyclone and necessary records required by each CAM plan.

*Testing:*

The permit does require a Method 5 performance test on each of the two cyclones subject to CAM. A table of test methods has been included in the permit if additional testing is

performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

*Reporting:*

No specific reporting has been included in the permit for the wood working operations.

*Streamlined Requirements:*

There are no streamlined requirements for wood working equipment.

**Furniture Finishing Equipment Requirements (F1, G1 and DT1)**

*Limitations:*

There are twelve spray booths, which include numerous HVLP spray nozzles in operation at Ethan Allen. Nine of the booths were installed prior to 1972 and are subject to the existing source visible standard (9 VAC 5-40-80) of 20% except during one six-minute period in any one hour where visible emissions shall not exceed 60%. Three of the spray booths have been installed since 1972, and are subject to the new source visible standard (9 VAC 5-50-80) of 20% except during one six-minute period in any one hour where visible emissions shall not exceed 30%.

The permit requires that all spray booths meet the new source visible standard. This was done in order to simplify the permit.

A requirement to operate filters on each booth has been included to ensure compliance with the visible emission standard.

*Monitoring and Recordkeeping:*

Ethan Allen will be required to perform daily inspections of each spray booth filter each day the spray booth is in operation. The daily inspections will reveal potential problems with the filters, thereby allowing the problems to be fixed prior to operation of the spray booth. If the filters are not functioning properly, visible emissions will be present.

Ethan Allen will be required to keep records of the monthly and annual throughput of finish materials and the daily filter inspections.

The daily inspections and recordkeeping required by the permit will satisfy the periodic monitoring requirement for the furniture finishing equipment.

*Testing:*

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

*Reporting:*

No specific reporting has been included in the permit for the furniture finishing operations.

*Streamlined Requirements:*

There are no streamlined requirements for wood finishing equipment.

**Facility Wide Requirements**

*Limitations:*

The facility has also chosen to limit the hazardous air pollutants (HAPs) from the entire facility to minor source thresholds to avoid additional MACT requirements. Therefore a condition has been incorporated into the permit to limit individual HAPs to less than 10 tons per year and total combined HAPs to less than 25 tons per year.

Even though Ethan Allen has requested a minor source HAPs limit the facility was classified as a major HAP source prior to the first MACT compliance date for Subpart JJ. Therefore Ethan Allen will remain subject to the requirements of 40 CFR 63 Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations (Wood Furniture MACT). All limitations from the Wood Furniture MACT have been included in the permit. Being subject to the Wood Furniture MACT means that Ethan Allen is also subject to 40 CFR 63 Subpart A, General Provisions. Any applicable limitations from the general provisions have also been included in the permit.

*Monitoring:*

The facility will be required to calculate the individual and total HAP usage to determine compliance with the minor HAP limit. The emissions of HAPs will be calculated monthly as the sum of each consecutive 12 month period.

The Wood Furniture MACT contains requirements for continuous compliance, including monthly and/or daily recordkeeping depending on the method of compliance. These requirements have been incorporated in the permit. The Wood Furniture MACT contains adequate monitoring to meet the periodic monitoring requirements, so no additional monitoring has been incorporated into the Title V permit.

*Recordkeeping:*

The facility is required to keep records to demonstrate compliance with the facility wide HAP limitations.

The Wood Furniture MACT contains requirements for recordkeeping, including maintenance of certified product data sheets for each material used and all calculations used to demonstrate continuous compliance. No additional recordkeeping has been included in the Title V permit. The facility has no control devices for HAPs therefore no equipment in this section of the permit is subject to CAM requirements.

*Testing:*

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

*Reporting:*

The Wood Furniture MACT requires a source report compliance status annually, as well as demonstrating continuous compliance semi-annually. These requirements have been included in the permit and will be submitted concurrently with the reporting requirements contained in the 9 VAC 5-80-110.

*Streamlined Requirements:*

The initial notification requirements associated with the Wood Furniture MACT have not been included in the permit because the source has already completed the notifications.

Ethan Allen has opted not to use a control device to meet the MACT requirements. Therefore, all requirements regarding a control device have not been included in the permit.

**GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

**STATE-ONLY APPLICABLE REQUIRMENTS**

Ethan Allen, Inc. did not identify any state-only enforceable requirements in their application, and all the requirements in the NSR permit are federally enforceable. Therefore, no state-only applicable requirements have been incorporated.

## FUTURE APPLICABLE REQUIREMENTS

The facility would have been subject to the Boiler MACT however they chose to take a facility wide minor source HAP limitation to avoid this and future MACT requirements. Therefore, no future applicable requirements have been identified by the permittee and the staff are unaware of any requirements that they could become subject to during the life of the Title V permit. Therefore, no future applicable requirements have been included in the permit.

## INAPPLICABLE REQUIREMENTS

The permittee has not identified any inapplicable requirements in the application. Therefore, no inapplicable requirements are included in the permit.

## COMPLIANCE PLAN

Ethan Allen, Inc. – Bridgewater Division is currently in compliance with all applicable requirements. No compliance plan was included in the application or in the permit

## INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

*Table IV. Insignificant Emission Units*

| Emission Unit No. | Emission Unit Description | Citation | Pollutant(s) Emitted (5-80-720 B) | Rated Capacity (5-80-720 C) |
|---|---|---|---|---|
| WS | Wood Stove | 9 VAC 5-80-720 B | TSP, PM-10, $NO_x$, $SO_2$, VOC | - |
| EG | Emergency Electric Generator - Propane Fuel | 9 VAC 5-80-720 B | TSP, PM-10, $NO_x$, $SO_2$, VOC | - |
| OT-1 | 7000 gallon No. 2 Fuel Oil Storage Tank | 9 VAC 5-80-720 B | VOC | - |
| OT-2 | 7000 gallon No. 2 Fuel Oil Storage Tank | 9 VAC 5-80-720 B | VOC | - |
| DK1 | Four (4) Dry Kilns | 9 VAC 5-80-720 B | VOC | - |

[1]The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

The dry kilns, as well as the two fuel oil storage tanks, were listed in the application as significant emission units. Calculations performed upon receipt of the original Title V permit application revealed that these units are actually insignificant. Therefore, the dry kilns and the two fuel tanks have been included as significant activities in the Title V permit.

The gluing operation was included in the application as an insignificant activity. This operation is covered under the Wood Furniture MACT. Therefore, because the operation has applicable requirements under the MACT, it was included as a significant activity in the Title V permit.

The dip tank was not included as significant or insignificant. The dip tank is covered under the Wood Furniture MACT. Therefore, because the dip tank has applicable requirements under the MACT, it was included as a significant activity in the Title V permit.

**CONFIDENTIAL INFORMATION**

Ethan Allen did not submit a request for confidentiality. Therefore, all portions of the Title V application are suitable for public review.

**PUBLIC PARTICIPATION**

A public notice regarding the draft permit was placed in the Daily News Record, Harrisonburg, Virginia, on April 5, 2004. EPA was sent a copy of the draft permit and notified of the public notice on April 5, 2004. West Virginia, the only affected state, was sent a copy of the public notice in a letter dated April 5, 2004. All persons on the Title V mailing list were also sent a copy of the public notice in e-mail dated April 5, 2004.

Public comments were accepted from April 5, 2004 to May 5, 2004. [No comments were received from the public, the affected state and the EPA regarding the draft permit.]

# ATTACHMENT A

## Permit Application Emission Inventory

**ATTACHMENT B**

**Minor NSR Permit**
**(dated March 1, 2004)**

# ATTACHMENT C

## Fabric Filter Compliance Assurance Monitoring (CAM) Plan

# ATTACHMENT D

## Cyclone Compliance Assurance Monitoring (CAM) Plan

# ATTACHMENT E

## Emission Calculations